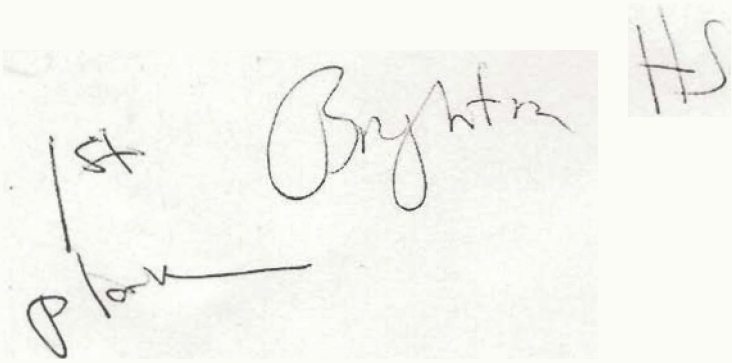

The Importance of our Nation's Wildlife Refuges

By

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The Importance of our Nation's Wildlife Refuges

The many wildlife refuges around our nation are the only things preserving our country's biological diversity. The National Wildlife Refuges in our Great Plains states are important to protecting prairie potholes, waterfowl production areas and prairie grasslands because without their perseverance, many endangered species of both pants and animals would now be extinct and many natural environments would be filled with cities.

The first National Wildlife Refuge was founded in 1903 to protect birds that were being hunted for their feathers. Today it has expanded to protect all wildlife and habitats throughout our country. The refuges are an invaluable sanctuary to thousands of different plant and animal species. They protect many rare ecosystems that will only survive through the safeguarding of the Refuge System. There are over 1370 different species of animals protected within the 540 refuges and 3000 waterfowl production areas (www.refugenet.org). The Northern Prairie Wildlife Research Center studies waterfowl production, wetland ecology, species biology, and the relationships between the biotic communities. It has also begun to study the potential prairie pothole region wetlands and migratory birds. This will ultimately help preserve our country's ecosystem (www.npwrc.usgs.gov).

The nation's prairie pothole regions are important to our ecosystem because they are homes to several different species of plants and animals. Waterfowl use the

depressed wetlands as nesting grounds, and it is a priority conservation area, as only about 40 to 50 percent of the original prairie potholes are un-drained (www.epa.gov). These glacially formed holes are filled with snowmelt and rain each year and sustain many different and unique species, such as pintails and gadwalls (www.fws.gov). The Prairie Pothole Joint Venture partners found that the success of duck breeding is importantly linked to the amount of perennial coverage in the area. They are also being used in the research to capture the carbon emitted by burning fossil fuels. The results of those tests suggest that the wetlands in the region can store more atmospheric carbon than croplands can, even if the acreage is smaller. Restoring these wetlands to the prairie pothole region will help clean our atmosphere and give more habitats for the wildlife in the region (www.npwrc.usgs.gov).

The National Wildlife Refuge System is very important to the survival of many different species of waterfowl. The expansion of cropland and the drainage of wetlands have drastically affected the lives of many migratory birds that live in those areas. Weed control could pose a long-term threat to many grain- and seed-eating birds that depend on those for survival. The loss of prairie grasslands to farmers has caused a decline in grassland-nesting birds and has forced them either to find somewhere else to nest or to not nest at all. The Platte River Valley is a major stopping point for many migratory waterfowl in the late winter and spring. The extensive use of this land has transformed the area greatly, and there has been a great loss of wetland habitat, which has brought up questions of the sustainability of migratory birds in the area. The lack of proper food has resulted in a decline in lipid storage in the birds, and this has caused much concern over

what the birds will eat when they come to the area. The drainage of wetlands has also decreased the available land for waterfowl reproduction, and competition for nesting sites and food has grown considerably (www.npwrc.usgs.gov).

There are currently many research projects being performed to determine the best ways to conserve our planet's natural habitats and wildlife. Scientists are trying to determine the roles of different plants in the environment, such as yellow sweetclover and spurge. The role of large pollinating plants is also being studied, as is plant-soil feedback and the role of arbuscular mycorrhizal fungi (AMF) in the invasion process. The relationships of native weeds and exotic plants in mixed-grass prairies was being studied to determine which type of plant grew most commonly near disturbed areas, such as prairie dog holes or roads (www.npwrc.usgs.gov). All of these projects are helping to save the environment of the Great Plains and to preserve the animals that live there.

The National Refuge System is also working on many restoration projects to return animals and plants to their natural habitats. They are re-planting many different grasses and improving the quality of the grasses that grow in the prairies. They are also trying to re-create many of the wetlands that have been lost through drainage and lack of water. The System is also studying how fire can help manage prairie grasslands and how it contributes to the growth of individual ecosystems. Another way they are trying to improve the prairie grasslands is by studying what affect grazers have on the area, and are considering re-introducing some to the Scott's Bluff area in Nebraska (www.npwrc.usgs.gov).

The Refuge System is even more important now that our country's population is growing so rapidly. Experts predict that the population will double in the next 100 years. This means that more water is used, more minerals used, and more cars are on the road. About four million acres of land are developed each year, and the ability of healthy lands to stay healthy and maintain their populations is lowered. With each section of land that is lost, the ecosystem is degraded and species become extinct. Only six percent of the 740 million forest acres of forest in the United States are protected from harvesting, which deprives our country of a critical habitat for our wildlife (www.refugenet.org).

The wildlife and their habitats are also facing a multitude of other problems. Many invasive species of plants and animals are crowding out the native species, and the habitats they live in are facing disruptive public behavior, such as destroying fragile plants and disturbing the inhabitants. The water quality is poor, and there is not much water around from all of the draining farmers do to create their croplands. There is not enough biological information to effectively manage the lands we have preserved, which is another reason why the research mentioned above is so important to the preservation of wildlife and their habitats. The Refuge System itself is facing a severe lack of funding, resulting in a $2 million backlog. The System is also understaffed, which makes it difficult to completely and efficiently protect the refuges themselves (www.refugenet.org).

Without the National Refuge System, many different and valuable species of plants and animals would be lost to us. The System protects the unique ecosystems of the Great Plains, and it ensures that future generations will be able to enjoy their beauty and complexity. If those four million acres of land had never been reserved for protection, they would now be lost to development and lumber harvesting. Despite all of the problems the System faces, it has come a long way in protecting the valuable wildlife and habitats in this area, and will continue to do so for generations to come.

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